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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Frederic Neftel

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EXAMINER

HOLLOWAY, IAN KNOBEL

ART UNIT

PAPER NUMBER

3763

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/501,394	Applicant(s) NEFTEL, FREDERIC	
	Examiner IAN HOLLOWAY	Art Unit 3763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-24 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-24 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on ____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/15/11</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Amendment

Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 3, 5-6, 8-9, 12, 14, 15, 17-20, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bonsall et al. (US Patent 5865766)**, herein after referred to as **B**, in view of **Blum (US Patent 4268268)**, herein after referred to as **B**, further in view of **Pfeiffer et al. (US Patent 5902253)**, herein after referred to as **P**

Regarding **Claim 1**, **B** discloses: Automatic peritoneal dialysis sampling system adapted to automatically sample at specific time intervals (Column 3, lines 35-45,

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device is for blood collection, but is still adapted to complete the tasks) volumic fractions of a dialysate contained in the peritoneum of a patient in order to evaluate the peritoneal membrane characteristics and/or improve the peritoneal dialysis for a given patient, said peritoneal dialysis sampling system being characterized by the fact that it comprises a single sampling container (64) , pumping means (45)

B fails to disclose multiple sampling containers and a series of valves adapted to direct a certain quantity of each fluid sample to a specific sampling container.

C teaches multiple sampling containers (23 and 21, rotary valve and containers) and a series of valves adapted to direct a certain quantity of each fluid fraction sample of dialysate taken from a peritoneum of a patient to a specific sampling container. (96. microvalve).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use multiple containers for sampling, since it has been held that a mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. The multiple containers allow for an improved dynamic measurement as opposed to the static measurement seen in single sample systems. This is ideal as it gives greater information of the characteristics of a sample (seen in column 2 of C).

Regarding **Claim 3**, **B** discloses: means for defining the specific time intervals for sampling volumic fractions in relation with the peritoneal dialysis program sequences.
(149)

Regarding **Claim 5 and 22**, **B** discloses: means for allowing the automatic sampling during the dwell time of the peritoneal dialysis cycle and/or during the drain cycle. (Abstract, the sampling is done when the infusion is halted)

Regarding **Claim 6**, **P** discloses: valves are of electromagnetic type. (96)

Regarding **Claim 8**, **B** discloses: connecting means for connecting it to the draining line between the draining means and a waste collector In order to collect samples of specific drain cycles. (Fig. 6)

Regarding **Claim 9 and 23**, **C** discloses: means for eliminating a volume of liquid between two samplings at least equivalent to the dead volume contained between the patient and the sampling level. (Fig. 6, the sample between the two samples would be eliminated alongside them)

Regarding **Claim 12**, **B** discloses: a memory key which contains all the necessary data to program the functioning of said automatic peritoneal dialysis sampling system and to store the sampling information. (abstract, a personal computer)

Regarding **Claim 14**, **P** discloses: sampling containers contain vacuum in order to draw the liquid automatically when in open connection with the drawing line. (162)

Regarding **Claim 17**, **P** discloses: analyzing means for directly analyzing of at least one characteristic of the sample in-line, such as by spectroscopy, fluorometry or by use of chemical or electro-chemical means. (27)

Regarding **Claim 18**, **P** discloses: analyzing means allows the measurement of at least one of the following constituents or characteristics: glucose, urea, creatinine, Sodium, Chloride, albumine, proteins, osmolarity or ph. (Column 1, line 22)

Regarding **Claim 19**, **P** discloses: means which use the result of the in-line analysis to optimize the next peritoneal dialysis exchange cycle or sampling intervals in order to improve the membrane characteristics evaluation and/or improve the peritoneal dialysis for a specific patient. (Column 10, lines 37-46)

Regarding **Claim 20**, **P** discloses: means for defining the specific time intervals for sampling volumic fractions in relation with the peritoneal dialysis program sequences. (63)

Regarding **Claim 15 and 24**, **B** discloses the process of separating samples with air bubbles. (62)

4. Claims 2, 4, 13, 16, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **B** and **P** in view of **Suzuki et al. (US Patent 6595948)**, herein after referred to as **S**

Regarding **Claim 2**, **B** teaches the invention as claimed above except for the combination of the fluid draining and supply line in a Y site.

S teaches: a supplying line (8) and supplying means (4) for supplying dialysis fluid to a peritoneal cavity, a draining line (84), draining means (87) for draining the fluid from said peritoneal cavity, connecting means for allowing a connection to a Y-site (116, 117, 118) on the draining line which is situated between the patient peritoneum (k) and the draining means of the peritoneal dialysis system.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the construction as taught by **S**, since **S** states at column 2, lines 34-64 that such modification would help provide a lightweight apparatus. Thus, it

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would have been obvious to one of ordinary skill in the art to apply the construction as taught in **S**, to improve the device of **B** for the predictable result of reducing weight.

Regarding **Claim 4 and 21**, **S** discloses: means for allowing the use of different peritoneal dialysis liquids and/or different concentrations for each exchange cycle. (4)

Regarding **Claim 13**, **B** fails to disclose the use of soft pouches.

However **Suzuki et al.** teaches the use of soft pouches. (4-6)

B discloses the claimed invention except for the use of soft pouches. **Suzuki et al.** teaches that it is known to use soft pouches to hold fluid in peritoneal dialysis. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the soft pouches as taught by **Suzuki et al.**, since such modification would make the device more effective.

Thus, it would have been obvious to one having ordinary skill in the art to modify the pouches taught by **B** in view of the soft pouches shown by **Suzuki et al.**, since the operation of the device is in no way dependent on how the fluid is carried. Soft pouches could be used in combination with the device of **B** to achieve the predictable result of providing fluid for peritoneal dialysis.

Regarding **Claim 16**, **B** fails to disclose a cooling circuit.

However **Suzuki et al.** teaches the use of a cooling circuit for dialysis fluid.

(Column 7, line 16)

5. Claims 7, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **B** and **P** in view of **Klein et al. (US Patent 4244787)**.

Regarding **Claim 7**, **B** fails to disclose a peristaltic pumping means.

However, **Klein et al.** teaches the use of a peristaltic pump in conjunction with an APD device. (19)

B discloses the claimed invention except for the pump type. **Klein et al.** teaches that it is known to use a peristaltic pump. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to replace the syringe pump with a peristaltic one as taught by **Klein et al.**, since such modification would make the device more reliable.

Thus, it would have been obvious to one having ordinary skill in the art to modify the pumping means taught by **B** in view of the peristaltic pump shown by **Klein et al.**, since the pumping means is in no way dependent on the type of pump used. A peristaltic pump could be used in combination with the device of **B** to achieve the predictable result of providing a pumping means.

Regarding **Claim 10**, **B** fails to disclose the two piece exchange system.

However, **Klein et al.** teaches a larger analysis device to be used instead of the simpler analysis system of **B**. The exchange system is shown as hooked in line with the waste line, and since the analysis system of **B** communicated with the microprocessor, it can be assumed that the combination of these devices would do the same.

Regarding **Claim 11**, **P** discloses the fact that data is exchanged between its analysis system and its dialysis system. (63 and 65)

Response to Arguments

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Applicant states, the 103 rejection was not properly stated, this has been changed above to show that the claims are obvious over instead of anticipated by. In addition, Applicant claims there is no motivation to combine B and C, however the motivation can be seen in greater detail in the rejection above. The claims remain rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IAN K. HOLLOWAY whose telephone number is (571)270-3862. The examiner can normally be reached on 8-5, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas D. Lucchesi can be reached on 571-272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ilan K Holloway/
Examiner, Art Unit 3763

/Nicholas D Lucchesi/
Supervisory Patent Examiner, Art Unit 3763